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- Title** Quality of the blood pressure phenotype in the GEnotipo, Fenotipo y Ambiente de la hipertension arterial en Uruguay (GEFA-HT-UY) study.[Miscellaneous Article]
- Source** Blood Pressure Monitoring. 19(6):339-345, December 2014.
- Abstract** **Background:** In the ongoing GEnotipo, Fenotipo y Ambiente de la HiperTension Arterial en Uruguay (GEFA-HT-UY) study, we applied standardized epidemiological methods to determine complex phenotypes including blood pressure (BP). In this report, we present the quality control of the conventionally measured BP.
- Methods:** Three trained observers measured BP five times consecutively in the seated position at each of two home visits and one clinic visit according to the guidelines of the European Society of Hypertension. On 1 December 2013, 4379 single BP readings in 170 participants were available for analysis.
- Results:** Fewer BP readings than the five planned per contact occurred only at one home visit. Among observers, the frequency of identical consecutive readings for systolic or diastolic BP varied from 0 to 4.2%. The occurrence of odd readings ranged from 0.1 to 0.6%. Only 21.6% of the systolic and diastolic BP readings ended on zero (expected 20%). At home visits, there was a progressive decline in BP from the first to the fifth reading. The average of the five BP readings also decreased from the first to the second home visit (-5.63/-2.34 mmHg).
- Conclusions:** Our study highlighted the necessity to implement a stringent quality control of the conventionally measured BP. The procedures set up in the GEFA-HT-UY study are resulting in a well-defined BP phenotype, which is consistent with that in other population studies.
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- Author Keywords** blood pressure; hypertension; population studies; risk factor.
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